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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,678	11/02/2000	Hiroyuki Kanemitsu	04739.0067	2921

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EXAMINER

LELE, TANMAY S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/703,678

Applicant(s)

KANEMITSU, HIROYUKI

Examiner

Tanmay S Lele

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. In response to applicant's argument that "Shigeki does not disclose arranging multiple types of topic information related to broadcast contents according to the order of display priority for each genre," a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Regarding claims 1 and 20, Applicant attempts to overcome the rejection by stating, "Shigeki does not disclose arranging multiple types of topic information related to broadcast contents according to the order of display priority for each genre." Examiner respectfully disagrees that Shigeki does not teach or recite this feature, when the claimed language is interpreted broadly. Specifically, note that Shigeki does refer to "a priority ranking table, separately provided for each genre (for example Figures 2b and 2c, and paragraph 0017, where for example sports and movies are the genres), defining priority ranking related to display of a plurality of topics (again for example Figures 2b and 2c, and paragraph 0017, where the topics are "Soccer," "Baseball," or "Foreign film: Western," ect)." Further note that, as it is respectfully believed that Shigeki does teach of the processing means displaying a plurality of topic information separately for each genre according to priority ranking defined in a priority ranking table (Figure 3 and paragraphs 0020 – 0026; note that topic information is displayed as claimed,

Art Unit: 2684

as per paragraph 0021 where both the image of the show and the names are displayed). Hence, because the Examiner is required to interpret the claims in the broadest reasonable manner under current examining practice, the Examiner is not persuaded by the Applicant's arguments suggesting that the reference is not capable of teaching the claimed as broadly interpreted.

2. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies ("arranging multiple types of topic information" and "not automatic extraction from supplementary information or search keyword, or display or a display means a program search screen image including the extracted keyword") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claims 1 and 20, Applicant attempts to overcome the rejection by stating, "Shigeki does not disclose arranging multiple types of topic information related to broadcast contents according to the order of display priority for each genre." Note that the claimed as presented does not specifically recite of multiple types of topic information. Further note, without conceding the cited reference does not teach the recited as broadly interpreted, Shigeki does allude to different types of topics in Figures 2b and 2c (for example, where the topics are "Soccer," "Baseball," or "Foreign film: Western," ect). Hence, because the Examiner is required to interpret the claims in the broadest reasonable manner under current examining practice, the Examiner is not persuaded by the Applicant's arguments suggesting that the reference is not capable of teaching the claimed as broadly interpreted.

Regarding claims 6 and 21, Applicant attempts to overcome the rejection by stating,

Art Unit: 2684

“Wehmeyer discloses a keyword search, but it is in response to input from a keyboard or the like, of a word or item subjectively selected as indicating a characteristic feature of the desired program, and not automatic extraction from supplementary information or search keyword, or display or a display means a program search screen image including the extracted keyword.”

Examiner respectfully disagrees since specific recitation of, “automatic extraction from supplementary information or search keyword, or display or a display means a program search screen image including the extracted keyword.” Further note, without conceding the combination does not teach the recited as broadly interpreted, that the argument additionally states, “automatic extraction from supplementary information *or* search keyword” indicating that either are applicable. Additionally, it was noted that the claimed additionally recites, “...using a search keyword selected by a user” further confusing the concept of automation. Hence, because the Examiner is required to interpret the claims in the broadest reasonable manner under current examining practice, the Examiner is not persuaded by the Applicant’s arguments suggesting that the references, when combined, do not teach or recite the claimed as broadly interpreted.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1 –3, 5, 12, 20, and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Shigeki (Shigeki, Japanese Patent Publication No. 11-220703).

Regarding claims 1 and 20, Shigeki teaches of a broadcast receiving device and a storage

Art Unit: 2684

device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps (Figure 1), comprising: a supplementary information acquiring means for acquiring supplementary information transmitted together with broadcast content (paragraphs 0002 and 0004); a display means for displaying said supplementary information (paragraphs 0004 and 0006); a processing means for processing said supplementary information for displaying on said display means (paragraphs 0004 and 0006); and a memory means for storing, separately for each genre of broadcast contents, a degree of display priority for each of plural types of topic information related to description of a broadcast content (paragraphs 0006, 0015, and 0016) using a priority ranking table separately provided for each genre, defining priority ranking related to display of a plurality of topics (Figures 2a – 2c and paragraph 0017); wherein said processing means obtains genre information and topic information from said acquired supplementary information, and displays said topic information separately for each genre on said display means according to said display priority degree defined in said priority ranking table stored in said memory means corresponding to the obtained genre information (Figure 3 and paragraphs 0021, 0024, 0025, 0026 and 0032).

Regarding claim 3, Shigeki teaches all the claimed limitations as recited in claim 1. Shigeki further teaches of comprising: a means for a user to input a selection of a topic to be displayed (paragraph 0015); wherein a display priority degree stored in said memory means is changed according to a number of times of topic selection by the user (paragraph 0017).

Regarding claim 5, Shigeki teaches all the claimed limitations as recited in claim 1. Shigeki further teaches of wherein said processing means includes a search processing means which displays a program search screen image on said display means (paragraphs 0038 and

Art Unit: 2684

0042), said program search screen image sequentially indicating, as search keywords used for program search (paragraphs 0038 and 0042), said topic information included in said supplementary information in order from the highest display priority degree (paragraphs 0038 and 0042).

Regarding claim 12, Shigeki teaches all the claimed limitations as recited in claim 1. Shigeki further teaches of wherein said supplementary information is a program sequence information of a digital broadcast (paragraph 0002).

Regarding claim 22, Shigeki teaches all the claimed limitations as recited in claim 20. Shigeki further teaches of wherein said storage device is readable by a computer for a receiver (Figure 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeki (Shigeki, Japanese Patent Publication No. 11-220703) as applied to claim 1 above, and further in view of Herz (Herz, US Patent No. 6,029,195).

Regarding claim 4, Shigeki teaches all the claimed limitations as recited in claim 1. Shigeki further teaches of displays said topic information according to said display priority degree based on the genre (paragraphs 0006, 0015, and 0016).

Art Unit: 2684

Shigeki does not specifically teach of wherein when no genre information is included in said supplementary information, said processing means estimates a genre from said topic information.

In a related art dealing with a system for customized identification of electronic objects, Herz teaches of wherein when no genre information is included in said supplementary information, said processing means estimates a genre from said topic information (starting column 27, line 59 and ending column 28, line 8).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki's program retrieval system, Herz's genre determination, for the purposes of customizing a system to a user's preferences, enabling the user to view desired content without repeated exertion and waste of time, as taught by Herz.

7. Claims 6 – 9, 16, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeki (Shigeki, Japanese Patent Publication No. 11-220703) in view of Wehmeyer (Wehmeyer, US Patent No. 6,169,543).

Regarding claims 6 and 21, Shigeki teaches of a broadcast receiving device and a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps (Figure 1), comprising: a supplementary information acquiring means for acquiring supplementary information transmitted together with broadcast content (paragraphs 0002 and 0004); a display means for displaying said supplementary information (paragraphs 0004 and 0006); and a processing means for processing said supplementary information for displaying on said display means (paragraphs 0004 and 0006); wherein said processing means includes a search processing means for extracting from

Art Unit: 2684

said supplementary information a search used for program search, displaying on said display means a program search screen image including the extracted search keyword (paragraphs 0038 and 0042), and displaying on said display means a search result screen image based on a program search using a search selected by a user (paragraphs 0038 and 0042).

Shigeki does not specifically teach of the keyword.

In a related art dealing with the customization of programming guides, Wehmeyer teaches keyword searches (starting column 14, line 54 and ending column 15, line 7).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki's search engine, Wehmeyer's keyword searches, for the purposes of efficient and fast access of information and further providing means to search for customized information, as taught by Wehmeyer.

Regarding claim 7, Shigeki in view of Wehmeyer teach all the claimed limitations recited in claim 6. Wehmeyer further teaches of wherein said search processing means extracts, as said search keyword, topic information included in said supplementary information and related to description of the broadcast content (starting column 14, line 54 and ending column 15, line 7).

Regarding claim 8, Shigeki in view of Wehmeyer teach all the claimed limitations as recited in claim 6. Shigeki further teaches of wherein when the user instructs a search while a topic information related to description of said broadcast content is displayed (paragraph 0042), displayed image is switched to a program search screen image and Wehmeyer further teaches of including said topic information as a search keyword (column 14, lines 56 -67).

Regarding claim 9, Shigeki in view of Wehmeyer teach all claimed limitations as recited in claim 6. Shigeki and Wehmeyer further teach of further comprising: a keyword storing means

Art Unit: 2684

for automatically storing, as a search keyword, a topic information included in a supplementary information corresponding to a program watched or listened to by the user (Shigeki: paragraph 0039 –0042 and Wehmeyer: column 2, lines 50 –61 and column 14, lines 61 –67).

Regarding claim 16, Shigeki in view of Wehmeyer teach all the claimed limitations as recited in claim 6. Shigeki further teaches of wherein said supplementary information is a program sequence information of a digital broadcast (paragraph 0002).

Regarding claim 23, Shigeki in view of Wehmeyer teach all the claimed limitations as recited in claim 21. Shigeki further teaches of wherein said storage device is readable by a computer for a receiver (Figure 1).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeki (Shigeki, Japanese Patent Publication No. 11-220703) in view of Wehmeyer (Wehmeyer, US Patent No. 6,169,543) as applied to claim 9 above, and further in view of Ryan et al (Ryan, US Patent No. 6,421,675).

Regarding claim 10, Shigeki in view of Wehmeyer teach all the claimed limitations as recited in claim 9. Shigeki in view of Wehmeyer do not specifically teach of wherein said keyword storing means stores, in correlation with each corresponding topic information, a keyword priority degree according to a number of times of topic information extraction; and said search processing means displays the stored topic information on the program search screen image according to said keyword priority degree (though Shigeki does allude to display according to priority in for example paragraph 0039).

In a related art dealing with searching content in a variety of media, Ryan teaches of 10. wherein said keyword storing means stores, in correlation with each corresponding topic

Art Unit: 2684

information, a keyword priority degree according to a number of times of topic information extraction (column 2, lines 25 –36; column 34, lines 5 – 27; and column 36, lines 64 – 67); and said search processing means displays the stored topic information on the program search screen image according to said keyword priority degree (column 2, lines 25 –36; column 34, lines 5 – 27; and column 36, lines 64 – 67).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki and Wehmeyer's search system, Ryan's search strategy, for the purposes of enhance the efficiency, usability, and effectiveness of a search engine, as taught by Ryan

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeki (Shigeki, Japanese Patent Publication No. 11-220703) in view of Wehmeyer (Wehmeyer, US Patent No. 6,169,543) as applied to claim 9 above, and further in view of Watanabe (Watanabe, Japanese Patent Publication No. 10-200431).

Regarding claim 11, Shigeki in view of Wehmeyer teach all the claimed limitations as recited in claim 9. Shigeki and Wehmeyer further teach of further comprising: a keyword mode switching means for switching between a receiving program keyword indicating mode in which a topic information within a supplementary information corresponding to a program presently received for listening and/or watching is displayed as a search keyword on the program search screen image (Shigeki: paragraphs 0039 – 0042 and Wehmeyer column 14, lines 61 –67).

Shigeki in view of Wehmeyer do not specifically teach of a registered keyword indicating mode in which a topic information stored in said keyword storing means as a search keyword is indicated on the program search screen image.

Art Unit: 2684

In a related art dealing with keyword retrieval systems in broadcast, Watanabe teaches of a registered keyword indicating mode in which a topic information stored in said keyword storing means as a search keyword is indicated on the program search screen image (paragraph 0001 and 0027 – 0029).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki and Wehmeyer's search methods, Watanabe's search mode, for the purposes of searching and displaying information with respect to topic, as taught by Watanabe.

10. Claims 13 – 15 and 17 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shigeki (Shigeki, Japanese Patent Publication No. 11-220703) or Shigeki (Shigeki, Japanese Patent Publication No. 11-220703) in view of Wehmeyer (Wehmeyer, US Patent No. 6,169,543) as applied to claim 1 or 6 above, and further in view of Shiga (Shiga, US Patent No. 6,005,562).

Regarding claims 13 and 17, Shigeki or Shigeki in view of Wehmeyer, teach all the claimed limitations as recited in claims 1 and 6. Shigeki or Shigeki in view of Wehmeyer do not specifically teach of wherein said supplementary information includes an extended format event descriptor.

In a related art dealing with digital broadcast, Shiga teaches of wherein said supplementary information includes an extended format event descriptor (starting column 12, line 60 and ending column 13, line 5).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki or Shigeki in view of Wehmeyer's broadcast system, Shiga's identifier, for

Art Unit: 2684

the purposes of including content to broadcast signals used by users to better make a selection, as taught by Shiga.

Regarding claims 14 and 18, Shigeki or Shigeki in view of Wehmeyer, teach all the claimed limitations as recited in claims 1 and 6. Shigeki or Shigeki in view of Wehmeyer do not specifically teach of wherein said supplementary information includes a content descriptor (though such concepts are alluded to in Shigeki in paragraphs 0002 –0004).

In a related art dealing with digital broadcast, Shiga teaches of wherein said supplementary information includes a content descriptor (starting column 12, line 60 and ending column 13, line 5).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki or Shigeki in view of Wehmeyer's broadcast system, Shiga's identifier, for the purposes of including content to broadcast signals used by users to better make a selection, as taught by Shiga.

Regarding claims 15 and 19, Shigeki or Shigeki in view of Wehmeyer, teach all the claimed limitations as recited in claims 1 and 6. Shigeki or Shigeki in view of Wehmeyer do not specifically teach of wherein said supplementary information includes a short format event descriptor.

In a related art dealing with digital broadcast, Shiga teaches of wherein said supplementary information includes a short format event descriptor (starting column 12, line 60 and ending column 13, line 5).

It would have been obvious to one skilled in the art at the time of invention to have included into Shigeki or Shigeki in view of Wehmeyer's broadcast system, Shiga's identifier, for

Art Unit: 2684

the purposes of including content to broadcast signals used by users to better make a selection, as taught by Shiga.

Citation of Pertinent Prior Art

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Inventor	Publication	Number	Disclosure
Watanabe	Japanese Patent Application	10-0200431	Multiplexed Broadcast Keyword Search System

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

Art Unit: 2684

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tanmay S Lele
Examiner
Art Unit 2684



NICK CORSARO
PRIMARY EXAMINER

tsl
September 14, 2004